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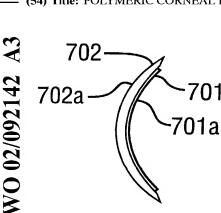
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(54) Title: POLYMERIC CORNEAL BANDAGES/LENSES FOR DELIVERY OF A PHARMACEUTICAL



(57) Abstract: An eye covering (700) for covering an exposed surface portion of an eye, the covering comprising a body having front and rear surfaces (702a and 701a) with the rear surface being shaped to conform to said exposed surface portion (701, 702) and at least a portion of the body comprising biologically compatible polymer fibre.

Inte onal Application No

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61L26/00 B056 B05B5/16 A61M11/00 B05B5/043 B05B5/053 G02B1/04 G02C7/04 B29D11/00 A61K9/00 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) B05B Á61M A61K B29D G02B G020 IPC 7 A61L A61F Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Category ° 1,2,4,5, WO OO 67694 A (PIRRIE ALASTAIR BRUCE X ;ELECTROSOLS LTD (GB); COFFEE RONALD ALAN (G) 16 November 2000 (2000-11-16) 7-14,19, 21-25, 27, 32-36, cited in the application 38-42,44 page 3, line 6 -page 5, line 6 page 22, line 27 -page 24, line 27 1,2, 7-**1**1,13, X WO 00 35524 A (PIRRIE ALASTAIR BRUCE ;DAVIES NEVILLE (GB); ELECTROSOLS LTD (GB);) 22 June 2000 (2000-06-22) 14,19, 27 - 3238 - 42page 48, line 20 -page 49, line 27 claims 54,56 Further documents are listed in the continuation of box C. χ Patent family members are listed in annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the *A* document defining the general state of the art which is not considered to be of particular relevance "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "E" earlier document but published on or after the international "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. document referring to an oral disclosure, use, exhibition or other means 'P' document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of mailing of the international search report Date of the actual completion of the International search 24/10/2002 14 October 2002 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Hars, J

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Inte nal Application No
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	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	Delevent to staim his
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	US 4 978 713 A (GOLDENBERG MERRILL) 18 December 1990 (1990–12–18)	1-3,7,8, 10-14, 19,20, 28,32
	column 1, line 19 - line 36	
Х	US 4 452 925 A (KUZMA PETR ET AL) 5 June 1984 (1984-06-05)	1-3,7,8, 10-15, 17-20, 28,32,44
	column 1, line 9 - line 15 column 2, line 8 - line 47	
Υ	US 4 952 212 A (BOOTH CHRISTOPHER G ET AL) 28 August 1990 (1990-08-28)	1-3,7,8, 10-14, 19, 28-32, 38-42,44
	column 1, line 4 -column 3, line 65	
Y	US 4 981 841 A (GIBSON DAVID R) 1 January 1991 (1991-01-01)	1-3,7,8, 10-14, 19, 28-32, 38-42,44
	column 1, line 9 - line 19 column 7, line 26 - line 29 column 9, line 43 - line 64	
А	DE 199 47 711 A (SCHRAGE NORBERT) 3 May 2001 (2001-05-03) claim 18	9,18,27, 42

International application No. PCT/GB 02/02240

INTERNATIONAL SEARCH REPORT

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)	
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:	
1. X Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: see FURTHER INFORMATION sheet PCT/ISA/210	
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:	
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).	
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)	
This International Searching Authority found multiple inventions in this international application, as follows:	
1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.	
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.	4
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:	
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:	!
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.	

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.1

Although claims 37-42 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

Continuation of Box I.1

Rule 39.1(iv) PCT — Method for treatment of the human or animal body by surgery $\frac{1}{2}$

Information on patent family members

Intermal Application No PCT/GB 02/02240

			101748	027 02240
Patent document cited in search report	Publication date		Patent family member(s)	Publication date
WO 0067694	A 16-11-200	O AU BR CN EP WO	4591400 A 0010326 A 1360490 T 1173135 A1 0067694 A1	21-11-2000 26-02-2002 24-07-2002 23-01-2002 16-11-2000
WO 0035524	A 22-06-200	O GB AU CN EP WO	2345010 A 1872500 A 1334746 T 1140262 A2 0035524 A2	28-06-2000 03-07-2000 06-02-2002 10-10-2001 22-06-2000
US 4978713	A 18-12-199	O AT AU CA DE DK EP ES IE JP PT PT	100216 T 2684588 A 1330674 A1 3887116 D1 3887116 T2 698388 A 0321403 A2 2061728 T3 62438 B 1250923 A 2825130 B2 89211 A ,B	15-01-1994 22-06-1989 12-07-1994 24-02-1994 16-06-1994 17-06-1989 21-06-1989 16-12-1994 08-02-1995 05-10-1989 18-11-1998 29-12-1989 30-11-1989
US 4452925	A 05-06-198	AU AU DE EP JP JP WO US	548496 B2 8272382 A 3274454 D1 0070897 A1 4033801 B 58500287 T 8202716 A1 RE33997 E	12-12-1985 26-08-1982 15-01-1987 09-02-1983 04-06-1992 24-02-1983 19-08-1982 14-07-1992
US 4952212	A 28-08-19	AT AU AU CA DE DK EP FI JP NO NO NZ US ZA	55890 T 600684 B2 6453486 A 1296629 A1 3673769 D1 538786 A ,B, 0224352 A1 864621 A ,B, 2541527 B2 62142110 A 864339 A ,B, 924101 A 218269 A 5053000 A 8608222 A	15-09-1990 23-08-1990 21-05-1987 03-03-1992 04-10-1990 14-05-1987 03-06-1987 14-05-1987 09-10-1996 25-06-1987 14-05-1987 14-05-1987 28-11-1989 01-10-1991 29-07-1987
US 4981841	A 01-01-19	91 AT CA DE DE EP ES JP	93708 T 1295238 A1 3787188 D1 3787188 T2 0240031 A1 2044856 T3 2661909 B2	15-09-1993 04-02-1992 07-10-1993 16-12-1993 07-10-1987 16-01-1994 08-10-1997

Information on patent family members

Intel al Application No PCT/GB 02/02240

cited in search report		date		member(s)	date
US 4981841	A		JP US	63005745 A 4983580 A	11-01-1988 08-01-1991
DE 19947711		03-05-2001	DF	19947711 A1	03-05-2001
DE 19947711 	A 	03-05-2001	DE 	1994//11 A1	03-05-2001

Form PCT/ISA/210 (patent family annex) (July 1962)